

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A device for monitoring the electromagnetic field emitted by a antenna, the device comprising:

a measurement arrangement for measuring at least one RF power signal input to the antenna in at least one frequency band, wherein said at least one RF power signal is indicative of the electromagnetic field strength emitted by the antenna over a given area, and

a communication module for transmitting said at least one RF power signal measurement to a remote processing facility,

wherein the communication module is configured to receive, from the remote processing facility, a command for controlling the at least one RF power signal input to the antenna to control, in response to a power control command received from the remote processing facility, an intensity of the at least one RF power signal input to the antenna.

2. (Previously Presented) The device of claim 1, wherein said measurement arrangement comprises a sampling circuit responsive to the at least one RF power signal input to the antenna, the sampling circuit generating a sequence of samples indicative of the electromagnetic field strength over a given time interval.

3. (Previously Presented) The device of claim 1, wherein said measurement arrangement comprises an average calculating circuit to generate signals indicative of the average electromagnetic field strength over a given time interval.

4. (Previously Presented) The device of claim 2, wherein:

    said sampling circuit generates a first set of samples indicative of the electromagnetic field strength over a given time interval,

    said measurement arrangement comprises an average calculating circuit to generate a signal indicative of the average electromagnetic field strength over a given time interval, and

    said average calculating circuit is configured for averaging sub sets of said first set of samples so as to generate a second set of averaged samples, said second set of averaged samples comprising a number of samples that is smaller than the number of samples comprised in said first set of samples.

5. (Previously Presented) The device of claim 1, wherein the device further comprises a memory for storing data representative of said at least one RF power signal.

6. (Previously Presented) The device of claim 4, wherein the device further comprises a memory for storing data representative of said at least one RF power signal, said memory being arranged to store at least said second set of samples.

7. (Previously Presented) The device of claim 1, wherein said measurement arrangement comprises a plurality of measuring channels, each measuring channel for measuring RF power signals input to said antenna in a respective frequency band.

8. (Previously Presented) The device of claim 7, wherein the device further comprises at least one switch for selectively feeding towards said communication module the output signal of any of said measuring channels, whereby RF power signals respectively indicative of electromagnetic field strengths emitted by said antenna for each of said frequency bands are adapted to be transmitted from the device.

9. (Previously Presented) The device of claim 1 further comprising a control module for controlling the at least one RF power signal input to the antenna.

10. (Cancelled).

11. (Currently Amended) A transmission apparatus comprising a device for monitoring an electromagnetic field emitted by a antenna, the transmission apparatus emitting at least one RF power signal to the antenna, the device comprising:

    a measurement arrangement for measuring the at least one RF power signal input to the antenna in at least one frequency band, wherein said at least one RF power signal is indicative of the electromagnetic field strength emitted by the antenna over a given area, and

    a communication module for transmitting said at least one RF power signal measurement to a remote processing facility,

wherein the communication module is configured to receive, from the remote processing facility, a command for controlling the at least one RF power signal input to the antenna to control, in response to a power control command received from the remote processing facility, an intensity of the at least one RF power signal input to the antenna.

12. (Previously Presented) An antenna comprising a device for monitoring an electromagnetic field emitted by the antenna, the device comprising:

a measurement arrangement for measuring at least one RF power signal input to the antenna in at least one frequency band, wherein said at least one RF power signal is indicative of the electromagnetic field strength emitted by the antenna over a given area, and

a communication module for transmitting said at least one RF power signal measurement to a remote processing facility,

wherein the communication module is configured to receive, from the remote processing facility, a command for controlling the at least one RF power signal input to the antenna to control, in response to a power control command received from the remote processing facility, an intensity of the at least one RF power signal input to the antenna.

13-26. (Canceled).

27. (Previously Presented) The device of claim 1, wherein the communication module transmits said at least one RF power signal to the remote processing facility using a wireless communication protocol.

28. (Previously Presented) The transmission apparatus of claim 11, wherein the communication module transmits said at least one RF power signal to the remote processing facility using a wireless communication protocol.

29. (Previously Presented) The antenna of claim 12, wherein the communication module transmits said at least one RF power signal to the remote processing facility using a wireless communication protocol.

30. (Previously Presented) The device of claim 1, wherein the antenna is positioned at a fixed location.

31. (Previously Presented) The transmission apparatus of claim 11, wherein the antenna is positioned at a fixed location.

32. (Previously Presented) The antenna of claim 12, wherein the antenna is positioned at a fixed location.

33. (Previously Presented) The device of claim 30, wherein the measurement arrangement measures at least one RF power signal input to a plurality of antennas positioned at the fixed location.

34. (Previously Presented) The transmission apparatus of claim 31, wherein the measurement arrangement measures at least one RF power signal input to a plurality of antennas positioned at the fixed location.

35. (Previously Presented) The antenna of claim 32, wherein the measurement arrangement measures at least one RF power signal input to a plurality of antennas positioned at the fixed location.